In the Claims

1. (Currently Amended) A welding-type power source controller comprising:

an input configured to receive feedback of a remote control process of a welding-type process; and

a processor configured to first ensure a remote control is operationally engaged and then continue to receive the feedback and override the remote control process if a control irregularity is detected.

2. (Original) The controller of claim 1 wherein the processor is configured to monitor the feedback to detect a rate of change in control commands for the remote control process indicative of an irregularity.

3. (Original) The controller of claim 2 wherein the rate of change in control commands indicative of an irregularity includes a rate of change indicative of at least one of a corrupt communication from the remote control, a disconnection of the remote control, and a communications failure from the remote control.

4. (Original) The controller of claim 2 wherein the processor is further configured to compare the rate of change of the control commands to a threshold to determine whether the rate of change exceeds a tolerance.

5. (Original) The controller of claim 1 wherein the remote control process includes a remote control in communication with a welding-type apparatus and the processor is further configured to notify an operator that the remote control is locked-out upon detecting an irregularity.

6. (Original) The controller of claim 1 wherein the processor is further configured to divert control of the welding-type process to a backup controller configured to control the welding-type process according to a last operator control input upon detection of an irregularity.

7. (Original) The controller of claim 6 wherein the processor is configured cause the backup controller to control the welding-type process until the welding-type process is discontinued.

8. (Original) The controller of claim 1 wherein the welding-type power source controller is configured to be incorporated into a welding-type power source.

9. (Original) The controller of claim 1 wherein the welding-type power source controller is configured to be incorporated into a portable welding-type device.

10. (Original) A method of controlling a welding-type process comprising:

remotely controlling a welding-type power source from a secondary control;

monitoring performance of the remote controlling; and

redirecting control of the welding-type power source to a primary control upon detecting a performance abnormality.

11. (Original) The method of claim 10 further comprising determining whether control commands sent from the remote control are indicative of a performance abnormality.

12. (Original) The method of claim 10 further comprising disregarding input from the remote control, upon detecting a performance abnormality of the remote control.

13. (Original) The method of claim 10 further comprising controlling the welding-type power source according to a previous user input upon detecting a performance abnormality.

14. (Original) The method of claim 10 further comprising notifying a user of a remote control failure upon detecting a performance abnormality.

15. (Original) The method of claim 10 further comprising locking-out the remote control upon detecting a performance abnormality.

16. (Original) The method of claim 15 further comprising removing the lockout only upon powering down the welding-type power source.

17. (Original) A welding-type apparatus comprising:

a power source configured to deliver welding-type power to perform a welding-type process;

a remote control configured to control an output of the welding-type power;

a monitoring control configured to monitor the remote control; and

a backup control configured to assume control of the welding-type process upon detection of a remote control malfunction.

18. (Original) The apparatus of claim 17 wherein detecting a remote control malfunction includes detecting commands from the remote control including a rate of change of the control commands that is at least one of greater than a maximum threshold and less than a minimum threshold.

19. (Original) The apparatus of claim 17 wherein the backup control is configured to control the output of the welding-type power source according to an operator constraint upon assuming control.

20. (Original) The apparatus of claim 19 wherein the backup control is configured to control the welding-type power source according to the operator constraint until the welding-type process is discontinued.

21. (Original) The apparatus of claim 17 wherein the monitoring control is further configured to place the welding-type power source into a lockout mode upon detecting a remote control malfunction.

22. (Original) The apparatus of claim 21 wherein the monitoring control is further configured to hold the welding-type power source in the lockout mode until the welding-type power source is powered down.

23. (Original) The apparatus of claim 17 wherein the backup control is configured to be incorporated into the power source.

24. (Original) The apparatus of claim 17 wherein the welding-type power source is configured to deliver welding-type power for at least one of a metal inert gas (MIG) welding-type

process, tungsten inert gas (TIG) welding-type process, a shielded metal arc welding (SMAW) welding-type process, an induction heating process, and a plasma-cutting process.

25. (Original) The apparatus of claim 17 wherein the backup control includes a primary control operating as a backup control.

26. (Original) A welding-type apparatus comprising:

remote means for controlling a welding-type apparatus;

means for monitoring the remote means; and

means for overriding the remote means upon detecting a control irregularity of the remote means.

27. (New) A welding-type power source controller comprising:

an input configured to receive feedback of a remote control process of a welding-type process; and

a processor configured to receive the feedback and override the remote control process if a control irregularity is detected; and

wherein the processor is further configured to monitor the feedback to detect a rate of change in control commands for the remote control process indicative of an irregularity.

28. (New) The controller of claim 27 wherein the rate of change in control commands indicative of an irregularity includes a rate of change indicative of at least one of a corrupt communication from the remote control, a disconnection of the remote control, and a communications failure from the remote control.

29. (New) The controller of claim 28 wherein the processor is further configured to compare the rate of change of the control commands to a threshold to determine whether the rate of change exceeds a tolerance.